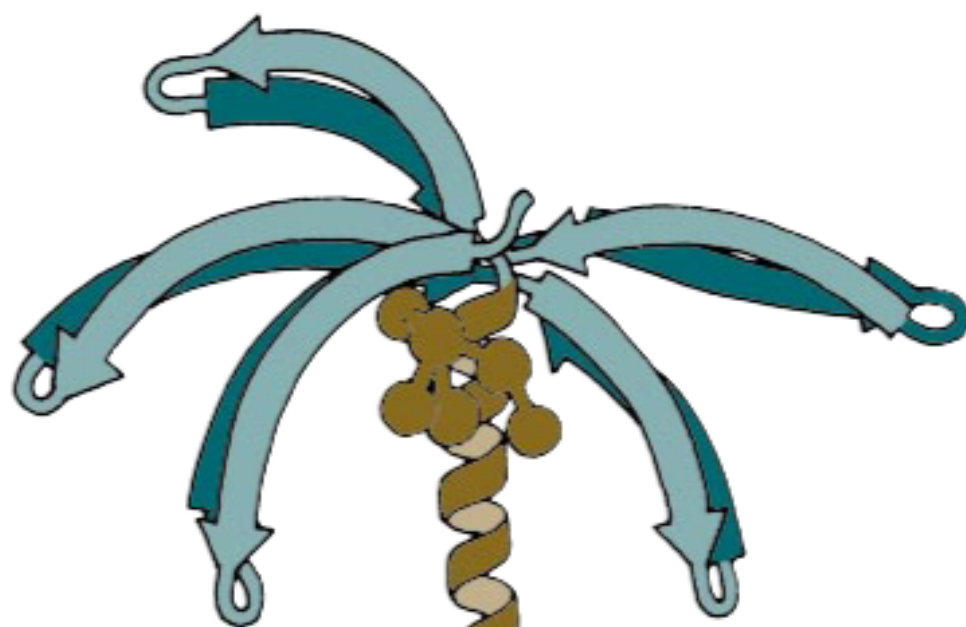


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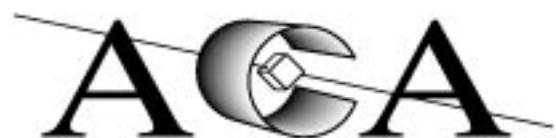
2001

Annual

Meeting

Call for Papers

July 21 - 26 Los Angeles, California



2001 Annual Meeting

July 21 - 26

Los Angeles, California

Program Chair

Duncan McRee
Head of Structure Determination
Syrrx
10450 Science Center Dr.
San Diego, CA 92121-1125
Phone (858) 622-8528 ext 4102
Fax (858) 623-0460
dmcree@syrrx.com

Local Chair

Daniel Anderson
Molecular Biology Institute
Paul Boyer Hall Room 219
Univ. of California at Los Angeles
Box 951570
Los Angeles, CA 90095-1570
Phone (310) 206-3642
Fax (310) 206-3914
dha@mbi.ucla.edu

Local Chair

Katherine Kantardjieff
Dept. of Chemistry & Biochemistry
California State Univ. at Fullerton
800 N. State College Blvd.
Fullerton, CA 92834
Phone (714) 278-3752
Fax (714) 278-5316
kkantardjieff@fullerton.edu

Program Committee

Simon Billinge
Jeff Bolin
Bryan Craven
Steven Muchmore
Thomas Schneider
Ray Stevens
Dave Stout
Frank von Delft

Local Committee

Melanie Bennett
Duilio Cascio
Orly Dym
David Goodsell
Marek Grzeskowiak
Tom Holton
Mary Kopka
Emily Maverick
Shuishu Wang
Joe Ziller

Registrar

Marcia Evans
ACA
P.O. Box 96 Ellicott Station
Buffalo, NY 14205-0096
Phone (716) 856-9600 ext. 321
Fax (716) 852-4846
marcia@hwi.buffalo.edu

Important Deadlines

Abstract Submission	March 2, 2001
Travel Grant Applications	March 2, 2001
Advance Registration	June 1, 2001
Hotel Reservations	June 18, 2001

Basic palm tree logo designed by Daniel
Anderson, final version by David Goodsell,
Scripps Research Institute.

IUCr Scientific Freedom Policy Statement

The Organizing Committee of the 2001 ACA Annual Meeting shall observe the basic policy of nondiscrimination and affirms the rights of scientists throughout the world to adhere or to associate with international activity without restrictions based on nationality, race, color, age, religion, political philosophy, ethnic origin, citizenship, language, or sex, in accordance with the Statutes of the International Council of Scientific Unions. At this meeting no barriers will exist which will prevent the participation of bona fide scientists.



General Information

Format

The Annual Meeting of the American Crystallographic Association, Inc., will be held July 21-26, 2001, in Los Angeles, California. The meeting will begin on Saturday, July 21, with three workshops, followed by lectures and poster sessions from Sunday, July 22 through the morning of Thursday, July 26. An exhibit show is planned for Sunday through Wednesday. All technical sessions, poster presentations and the exhibit show will be held in The Westin Bonaventure Hotel and Suites, 404 South Figueroa St., Los Angeles, CA 90071.

Hotel

Two blocks of rooms have been reserved at the Westin Bonaventure. Our conference room rate is \$122/single, twin, double or triple, plus 14.8% taxes. A Single is defined as "one person"; Twin is "2 people with 1 twin bed and 1 double bed"; Double is "2 people with 1 bed"; Triple is "3 people with 1 twin bed and 1 double bed or 1 king/queen bed and 1 rollaway bed". The deadline for reserving a guest room is June 18, 2001. After this date, the conference room rate and availability cannot be guaranteed. Please make your hotel reservations **early** using the reservation request form on page 17. Check-in is 3:00pm. Check-out time is 11:00am. A deposit of one night room and tax is required to reserve a guest room. There is an early check-out fee of \$25.00. Please be sure to confirm your departure date upon check-in. For reservations call (213) 624-1000 or fax (213) 612-4797.

Travel Grants

Limited funds will be available to help students and young scientists in attending the 2001 meeting by contributing toward travel and related expenses. Preference will be given to those presenting a paper. Interested parties should return the application form on page 15 to ACA Headquarters by January 31, 2001. Applications received after this deadline will be reviewed only if funds remain after the initial review. The final deadline for applications will be March 2, 2001.

Registration

All attendees, including invited speakers, must register. All registered participants will receive a conference bag and materials, including a conference badge securing admission to the Opening Reception, Young Scientist Mixer and the Exhibit Show. Conference badges for scientific registrants will also secure admission to the scientific sessions. General registration will begin on Saturday, July 21, in the Westin Bonaventure. However, registered workshop participants should pick up their materials on Friday, July 20, in the hotel between 6:00pm and 9:00pm. Participants with special needs arising from disabilities are invited to contact the Registrar to discuss appropriate accommodations.

Registration Fees

	Before June 1	After June 1
Regular Member	\$250.00	\$325.00
Retired Member	\$100.00	\$100.00
Student Member	\$ 95.00	\$ 95.00
Non-member*	\$325.00	\$400.00
Student Non-member*	\$120.00	\$144.00
One-day Member	\$150.00	\$225.00
One-day Non-member*	\$195.00	\$270.00

*Increment charged to non-member registration may be credited toward New Member dues for 2001 by submitting the membership application on page 19.

The Advance Registration Form is on page 13. There will be no registration fee for Accompanying Guests. However, tickets for the Opening Reception, YSSIG Mixer, Mentor/Mentee Dinner and Annual Banquet are available for Accompanying Guests: Opening Reception-\$30.00, YSSIG Mixer-\$10.00, Mentor/Mentee Dinner-\$10.00, Annual Banquet-\$55.00. Those wishing to attend the scientific sessions must register at the Regular Member rate.

Payment

All prices listed are in U.S. dollars and must be submitted in U.S. dollars. Registration forms must be postmarked or received on or before June 1, 2001, to be eligible for the advance registration fees. After June 1, registrations will be accepted at the higher rate. On-site registration will be available at the higher rate. Fees for workshops, the banquet and the Mentor/Mentee Dinner are separate from the registration fee but should be included in the total payment. Purchase orders will not be accepted. Only U.S. checks, and VISA and MasterCard payments will be accepted. Please make checks payable to ACA and mail to:

**ACA Meeting Registration
P.O. Box 96 Ellicott Station
Buffalo, NY 14205-0096 USA**

Forms submitted via fax must include VISA or MasterCard payment information.
Fax to (716) 852-4846.

Cancellation Policy

Cancellation and requests for refunds should be made in writing to ACA Headquarters. For cancellations received before June 1, 2001, 20% of the total remittance will be deducted. Requests received between June 2 and June 30, 2001, will be honored minus 50% of the total remittance. Fees will not be refunded after July 1, 2001.



Social Program

Opening Reception at Los Angeles Central Library

Our Opening Reception will begin at 7:00 pm on Saturday, July 21, 2001. We will meet under the whimsical chandeliers of the 8-story atrium in the new wing of Los Angeles Central Library. This is one of the largest library facilities in the country and serves the largest population in the nation. The rotunda, with its murals and chandelier, one level up from street level, deserves several second visits after our party. To reach Central Library, exit the Westin Bonaventure Hotel on the Flower Street side, go south (slightly downhill) to 5th Street. Central Library is the building with a pyramidal finial, across 5th and Flower on the diagonal. Enter through the Garden on Flower Street. Tickets for this event are included with your Registration Fee. Additional tickets may be purchased for Accompanying Guests for \$30.00.

The Mentor/Mentee Dinner

The Mentor/Mentee Dinner will be at California Pizza Kitchen, at Wells Fargo Center, 330 S. Hope Street, on Sunday, July 22, 2001, beginning at 7:30pm. The cost for this event is \$10.00 per ticket. This fee is **not** included in your registration fee.

The local information web site describes two alternate walking routes: a short one dotted with public art, and a slightly longer route past the tallest office tower west of the Mississippi, along a stairway sometimes likened to the Spanish Steps in Rome. The building housing the restaurant contains numerous sculptures, many by Robert Graham. The views and the computer-controlled fountains of California Plaza are across the street.

YSSIG Mixer

The Young Scientists SIG Mixer will be held at the Bonaventure Brewing Company, on Monday, July 23, 2001, beginning at 7:30pm. The Brewing Company is located within the Westin Bonaventure Hotel complex. It is an in-house microbrewery with a very nice restaurant and is located on the pool deck level, above our meeting

rooms. Please indicate on your registration form if you will attend this function. There is no separate charge for registered meeting participants for this event. Tickets are available for accompanying guests for \$10.00.

Annual Banquet and Awards Ceremony

Our banquet will be held in the opulent and historic Regal Biltmore Hotel on Wednesday, July 25, 2001. This Beaux Arts structure was designed by Schultze and Weaver (1923-28), the same architects who designed the Waldorf Astoria in New York. The ceilings were painted by Giovanni Smeraldi. The Biltmore Hotel has been used as the set for numerous movies, and has been the site of historic events large and small. It's a tourist destination on par with many European palaces. To reach the Biltmore starting from the southeast



Photo by Dan Anderson

corner of the Westin Bonaventure Hotel (5th and Flower Streets), walk 1 block east on 5th Street past Central Library. Entrances to the Biltmore are on Grand Avenue, 5th Street (most direct), and Olive Street (most interesting, but a longer walk). Reception with cash bar begins at 6:00 pm in the Tiffany Room, followed by the banquet beginning at 7:00 pm in the adjacent Crystal Room. Dinner tickets for registered students are \$20.00. Tickets for all others are \$55.00. The menu will include two glasses of wine and a choice of Breast of Chicken sliced and fanned filled with Mushrooms and Fresh Herbs **or** Tri Tip Steak served with mushrooms and port wine sauce. Dessert will be Strawberry Amaretto Torte and Amaretto.



Travel to Los Angeles

Travel to Los Angeles and the Westin Bonaventure Hotel

Almost all of us will fly into Los Angeles International Airport (LAX). Burbank Airport is a little nearer to the Westin Bonaventure Hotel, but flying there will likely increase the cost of your trip.

The local information web site (http://www.doe-mbi.ucla.edu/people/dha/aca2001_website.html) gives detailed instructions for transportation from LAX to the Westin Bonaventure Hotel. The airport shuttles cost about \$12.50 each way. The three airport shuttle companies are LAXpress, Prime Time, and Super Shuttle. Taxis cost about \$35 each way, regardless of number of passengers. The cheapest way to travel from LAX to the Bonaventure Hotel is to ride most of the way on the new LA Metro. The trip begins on the free LAX Shuttle Line G. Note that “LAX Shuttles” and “airport shuttles” are very different. Metro maps and tickets are available at the Metro Green Line station at the terminus of the LAX Shuttle Line G, or you can download the map from the LA Metro web site (linked to the local information web site). For rental car driving directions, see the local information web site. Parking downtown is very expensive. The cheapest we found so far is currently \$19 per day for Bonaventure guests.

If you arrive by Amtrak at Union Station, you may reach the Westin Bonaventure Hotel by a short taxi or shuttle ride, or by the Metro Red Line. It's too far to walk, even without luggage. For shuttle details, see the local information web site. By Metro Red Line, get off at the 7th Street/Metro Center stop at 660 South Figueroa Street. The hotel is the only building on the 400 block between Flower and Figueroa streets.



The Westin Bonaventure Hotel and Suites, 404 South Figueroa Street.
Photo by Dan Anderson.

Post-meeting Excursion to the Getty Center

After the conclusion of the meeting, we will send buses with luggage compartments to the Getty Center, one of the world's great masterworks of architecture (Richard Meier; gardens by Robert Irwin). The hilltop site provides panoramic views of the city, the Santa Monica Mountains, and the Pacific Ocean. The structures frame the views, the volumes, and the light. You could spend days on a pixel-by-pixel examination of the Getty Center, then days in the collections and exhibits. You will need comfortable shoes and sunglasses; it is literally and figuratively dazzling. Buses will leave the Westin Bonaventure Hotel at 1:00pm July 26, 2001. There is no fee to enter the Getty Center, however, tickets to cover the cost of the bus ride are \$10 and **must be reserved in advance with your registration form**. Tickets will **not** be available at the on-site Registration Desk. Getty Center food services range from portable coffee carts to a restaurant (with an Alexis Smith installation) that requires reservations. It takes about 20 minutes to walk down, about 5 minutes to ride the tram down to the parking garage. Buses will leave the Getty Center parking garage at 5:30 pm, and take you and your luggage to Los Angeles International Airport.



Saturday, July 21 - Workshops

WK01 Iterative Single-wavelength Anomalous Scattering Method

Organized by B.C. Wang (wang@bcl1.bmb.uga.edu)

This is a full day workshop to be held at the Westin Bonaventure Hotel. During the ACA meeting in St. Paul, several papers of successful protein structure determinations using single-wavelength anomalous scattering data, including three de novo structure determinations by sulfur-SAD phasing, were presented. It is clear that this method is becoming increasingly powerful, and that there is considerable interest. The workshop will include lectures, hands-on calculation and demonstrations with experimental anomalous scattering data from a single wavelength. The fee is \$60 for registered students and \$70 for all other participants.

WK03 Atomic Force Microscopy of Crystal Surfaces

Organized by Alex McPherson (amcphers@uci.edu)

Atomic Force Microscopy (AFM) has proven a useful tool for visualizing and analyzing the mechanisms and kinetics of crystal growth, particularly the growth of macromolecular crystals. This can be carried out in mother liquors during the actual course of growth of crystals nucleated either *in situ* or *ex situ*. This workshop will review the principles of AFM technology and its practical applications to crystallization. Some representative results will be presented, instruments shown and described, and prospects for the future will be explored. This is a full day workshop to be held at the Westin Bonaventure Hotel. The fee is \$60 for registered students and \$70 for all other participants.

WK02 Real-space Pair Distribution Function Methods

Organized by Simon Billinge (billinge@pa.msu.edu), Thomas Proffen (proffen@pa.msu.edu) and Valeri Petkov (vpetkov@phys.uni-sofia.bg)

This is a full day workshop to be held at the Westin Bonaventure Hotel. Obtaining structure from disordered crystals is a challenge. Recently significant advances have been made in the real-space atomic pair distribution function (PDF) technique allowing the local structure of disordered materials to be studied in unprecedented detail. This technique utilizes both Bragg and diffuse scattering resulting in information beyond the average structure. This method also allows you to obtain structural information from poorly crystallized, amorphous, or mixed crystalline and amorphous samples. After a brief introduction about applications of the technique, workshop attendees will learn, through hands on examples, how to use freely available software to obtain PDFs from x-ray and neutron data. They will then be able to model the PDFs using full-profile regression programs to obtain 3-D structural information from the data. Basic computer skills are helpful. Participants are encouraged to bring a powder diffraction data-set of their own to be analyzed and will receive a copy of all software used (contact billinge@pa.msu.edu for more details). The fee is \$60 for registered students and \$70 for all other participants.

EVENING SOCIAL EVENT

Opening Reception

Los Angeles Central Library

7:00pm - 10:00pm



Sunday, July 22

01.01 Late Breaking Macromolecular Structures

Half day session organized by Alice Vrielink (alice.vrielink@bri.nrc.ca)

01.02 Computational Methods and Analysis

Half day session organized by Todd Yeates yeates@mbi.ucla.edu and Ed Marcotte (marcotte@icmb.utexas.edu)

This session will cover new computational approaches to the broad areas of macromolecular structure determination and analysis of protein structure, motion, organization and function.

07.01 Validating Small Molecule Crystal Structures for Correctness, Quality and Precision

Full day session organized by R. Curtis Haltiwanger (r_curtis_haltiwanger@sbphrd.com) and Anthony L. Spek (a.l.spek@chem.uu.nl)

Focus: The session will focus on tools and methods for validating crystallographic results for small molecule structures and will broadly explore the general topic of validation.

Tentative Invited Speakers:

George Sheldrick (Univ. of Gottingen, Germany)
David Watkin (Oxford Univ., U.K.)
Anthony Linden (Univ. of Zurich, Switzerland)
I. David Brown (McMaster Univ., Canada)
Michael Hoyland (IUCr, U.K.)
Ton Spek (Utrecht Univ., The Netherlands)
Peter Mueller (Univ. of Gottingen, Germany)

07.02 Supramolecular Structure and Engineering

Full day session organized by Bill Duax (duax@hwi.buffalo.edu) Contributed papers are welcome.

Tentative Invited Speakers:

Yasuhiro Aoyama (Kyushu Univ., Japan)
Microporous Metal-Organic Solid Catalysts
Makoto Fujita (Nagoya Univ., Japan)
Self-Assembly of Discrete Structures via Coordination
George W. Gokel (Washington Univ., USA)
Experimental Evidence for Alkali Metal Cation- π Interactions
Nadrian C. Seeman (New York Univ., USA)
DNA Nanotechnology
Rui Tamura (Kyoto Univ., Japan)
Preferential Enrichment: A New Enantiomeric Resolution Phenomenon Closely Associated with Polymorphic Transformation during Crystallization
Yuji Ohashi (Tokyo Inst. of Technology, Japan)
in situ Observation of Intermediates in Several Organic Reactions
Kenneth Raymond (Univ. of California-Berkeley, USA)
Coordination Chemistry Supramolecular Clusters: Host-Guest Chemistry of Molecular Flasks
Ivan Huc (IECB, France)
DNA or Gramicidin Mimics - Double Helices Assembled from Synthetic Molecular Strands

04.01 Gas Clathrates, Ices and Planetary Materials

Full day session organized and chaired by Bryan Chakoumakos (kou@ornl.gov) and Lee Groat (lgroat@eos.ubc.ca)

Invited Speakers:

E.D. Sloan (Colorado School of Mines, USA)
Structural Stability
L.A. Stern (US Geological Survey, USA)
Synthesis and Metastability
C.J. Rawn (Oak Ridge National Laboratory, USA)
Neutron Powder Diffraction Studies
W.F. Kuhs (Univ. of Gottingen, Germany)
Elastic and Inelastic Scattering Studies
J.S. Loveday (Univ. of Edinburgh, Scotland)
Polymorphism at High Pressure
J.S. Tse (Nat'l Research Council of Canada, Canada)
Dynamics and Modeling
W.B. Durham (Lawrence Livermore Laboratory, USA)
Planetary Ices
G.A. Lager (Univ. of Louisville, USA)
Hydrogen Bonding at High-pressures
J.B. Parise (SUNY at Stony Brook, USA)
High-pressure Behavior
N.L. Ross (Virginia Tech, USA)
Mineral Physics
S.A.T. Redfern (Cambridge Univ., U.K.)
Order-disorder in Minerals
C. Benmore (Argonne National Laboratory, USA)
Supercritical Fluids
T. Sabine (Australia Nuclear Science & Technology Org, Australia) Fractal Petrography
K. Bennett (Los Alamos National Laboratory, USA)
Texture Studies

Contributed abstracts on these subjects, as well as any other neutron scattering applications to crystallography, will be presented in a third half-day session on Thursday, July 26, of oral presentations and lively poster sessions held throughout the meeting.

Poster Preview I

These lunch time presentations, organized by the YSSIG, will be approximately 5 minutes long each. Please indicate your willingness to participate in this session with your abstract submission.

Poster Session I

5:30pm-7:30pm - Pasadena Room

EVENING SOCIAL EVENT

Mentor/Mentee Dinner

California Pizza Kitchen 7:30pm

(tickets required-see registration form page 15)



Monday, July 23

02.01 General Interest I and II

Full day session organized by David Duchamp (dkdchamp@aol.com)

Presentations will be selected from submitted abstracts. All topics and disciplines welcome.

06.01 Complementarity of Small-Angle Scattering with Other Analytical Techniques

Half day session organized and chaired by Andrew Allen (andrew.allen@nist.gov)

Confirmed Invited Speakers:

L. Pollack (Cornell Univ., USA)

Sub-Millisecond Time-Resolved Small-Angle X-ray Scattering Studies of Protein Folding

P. Cebe (Tufts Univ., USA)

Two-Dimensional Optical Ellipsometry and SAXS Studies of Polymer Crystallization Kinetics and Blend Phase Separation

P. Gammell (Lucent Technologies, USA)

Novel Vortex Physics in the Borocarbide Superconductors

06.02 New Small-Angle Scattering Instrumentation and Data Analysis Techniques

Half day session organized by Andrew Allen and chaired by Jinkui Zhao

Confirmed Invited Speakers:

C.J. Glinka (NIST, USA)

Recent Developments in SANS Instrumentation and Methods at NIST's Center for Neutron Research

J. Zhao (Oak Ridge National Laboratory, USA)

SANS Development at the Spallation Neutron Source

G.G. Long (NIST, USA)

Advances in USAXS Imaging

These two small-angle scattering session will feature some of the latest developments in SAS instrumentation and analysis, and their application, with other techniques, in state-of-the-art studies in physics, biology, polymer and materials science. We also plan a tribute to the late Harry Brumberger, one of the founding fathers of the SAS community both in the U.S. and abroad.

Poster Preview II

These lunch time presentations, organized by the YSSIG, will be approximately 5 minutes long each. Please indicate your willingness to participate in this session with your abstract submission.

TR01 Transactions Symposium High Throughput Crystallography

Full day session organized by Duncan McRee (dmcree@syrrx.com) and Steve Muchmore (muchmore@pprd.abbott.com)

The morning session will focus on Methodology unique to high-throughput crystallography. While the application is obvious to the current structural genomics projects, abstracts detailing small molecule experience are encouraged.

Invited Speakers:

Ray Stevens (Scripps Research Inst., USA)

Anastassis Perrakis (Dutch Cancer Inst., The Netherlands)

Gerard Bricogne (MRC, UK)

George Sheldrick (Univ. of Goettingen, Germany)

The afternoon session, organized by Steve Muchmore, will focus on reports from Structural Genomics Projects.

Keynote Speaker:

John Norvell, NIH Protein Structure Initiative

Poster Session II

5:30pm-7:30pm - Pasadena Room

Evening Social Event

Young Scientist SIG Mixer

Bonaventure Brewing Company 7:30pm



Tuesday, July 24

01.03 Macromolecular Complexes

Half day session organized by Patrick von Roey (vanroey@wadsworth.org)

I intend to put together a session with a common theme of the analysis of intermolecular interactions between macromolecules. Emphasis will be placed on structures of multienzyme complexes and macromolecular assemblies but unusual protein-nucleic acid or protein-carbohydrate complexes could find a place here. Nominations for speakers are welcome and at least two talks will be selected from contributed abstracts.

01.04 Determining Membrane Protein Structure: New Methods/New Results

Half day session organized by Michael Garavito (garavito@magaera.bch.msu.edu)

This session will focus on the new advances in the structure determination of integral membrane proteins. The speakers will discuss the new methodologies and the critical breakthroughs that have led to recent successful structure determinations as well as new structural results and the new techniques envisioned for the future.

Tentative Speakers:

Ron Stenkamp (Univ. of Washington, USA)

Structure Determination of Visual Rhodopsin

Robert Stroud (Univ. of California, San Francisco, USA)

Channel Structure and Function

Patrick Loll (Univ. of Pennsylvania, USA)

The Critical Parameters in Membrane Protein Crystallization

Bart Staker (Emerald Biostructures, WA, USA)

Membrane Protein Crystallization using Cubic Lipidic Systems

Douglas Rees (California Inst. of Technology, USA)

04.02 Neutron Scattering

Half day session organized by Bryan Chakoumakos (kou@ornl.gov)

Oral presentations will be selected from contributed abstracts.

05.01 Area Detectors, Expanded Capabilities and New Limitations

Full day session organized by John C. Huffman (huffman@indiana.edu) and Donald L. Ward (ward@cem.msu.edu)

Fankuchen Award Presentation and Lecture - awardee to be announced

Poster Preview III

These lunch time presentations, organized by the YSSIG, will be approximately 5 minutes long each. Please indicate your willingness to participate in this session with your abstract submission.

03.01 NIST Centennial Celebration Crystallographic Highlights

Full day session organized by Winnie Wong-Ng (winnie.wong-ng@nist.gov) and Alan Mighell (alan.mighell@nist.gov)

The Centennial Celebration of the National Institute of Standards and Technology (NIST), formerly known as the National Bureau of Standards (NBS), takes place in the year 2001. NIST has a long history of crystallographic research, and has made significant contributions to the advancement of the fields of crystallography, biology, and materials science. A one-day symposium will be dedicated to celebrate this special occasion. Talks will focus on a broad spectrum of topics including structural databases, high-pressure crystallography, neutron and x-ray diffraction, proteins, biomaterials, and synchrotron radiation. Presentations will be given by scientists from the various divisions at NIST as well as from outside organizations.

Partial List of Invited Speakers:

Leonid A. Bendersky

Electron Diffraction at NIST

Robert T. Downs

The Analysis of Bonding Changes in Pyroxenes at Pressure and Temperature using Procrystal Electron Densities

Gary L. Gilliland

Protein Crystallography and Databases at NIST

Camden R. Hubbard

NIST/ICDD Powder Diffraction Research

Gabrielle G. Long

Synchrotron Facilities

Gasper J. Piermarini

High Pressure X-ray Crystallography with the Diamond Cell at NIST/NBS

Anthonio Santoro

Crystallography at the NBS/NIST Reactor

Brian H. Toby

Combined Neutron and X-ray Powder Diffraction for Determining Structures of Zeolite Materials

Poster Session III

5:30pm-7:30pm - Pasadena Room

04.03 Planetary Ices

Organized by Dave Stevenson (djs@gps.caltech.edu)

... including the latest and greatest pictures of icy objects in our solar system.



Wednesday, July 25

01.05 Protein Kinases, Phosphatases and Signaling Proteins

Half day session organized by Ann Stock (stock@mbcl.rutgers.edu)

Protein phosphorylation is a widely used strategy in receptor-mediated signal transduction pathways. This session will examine structure/function relationships in protein kinases, phosphatases and associated proteins. Interactions with substrates and mechanisms of regulating enzyme activity will be explored.

Confirmed Invited Speakers:

James Hurley (NIDDK/NIH, USA)

A Structural Genomics Approach to Signal Transduction

John Kuriyan (Rockefeller Univ./HHMI, USA)

Structural Studies of Inactivation Mechanisms of Protein Kinases

Cynthia Stauffacher (Purdue Univ., USA)

Structural Interpretations of the Activation, Inhibition and Self-regulation of the Low Molecular Weight Phosphatases

01.06 Problem/Difficult Structures

Half day session organized by Bill Furey (fureyw@pitt.edu)

05.02 Diffraction Methods in Undergraduate Education

Full day session organized by Allen Hunter (adhunter@cc.ysu.edu)

The morning session will focus on teaching novice users who want to add elementary single crystal methods to their tool box in the same way/depth that they use NMR, MS, etc., (i.e., the increasing number of synthetic chemists who just want a hammer to crack structural problems) and the afternoon session will focus more on moving students beyond the pseudo-black box towards teaching more advanced topics at a more advanced level (i.e. to do more "real" crystallography).

07.03 Cool Structures Symposium

Full day session organized by Jeannette Krause Bauer (jeannette.krause@uc.edu)

SP.01 Frontiers in Crystallization

Half day session organized by Bernhard Rupp (br@llnl.gov)

As indicated by the name of the most powerful structure determination technique presently known, X-ray crystallography, the availability of crystals is a prerequisite without which neither individual small molecule crystallographers, nor multi-laboratory structural genomics initiatives can progress. While the latter have attracted great attention in past years, only a few sessions have addressed the peculiarities of small molecule crystals. Despite the great variety of materials crystallized, ranging from metal alloys through small organic molecules to supramolecular assemblies and finally biological macromolecules of extraordinary complexity, many problems as well as the tricks to overcome them are common to all crystallization projects. A review of some of these and the importance to different areas will be presented. Possible topics include alloys, small organic molecule crystals, supramolecular assemblies, crystallization polymorphism in organic and pharmaceutical products, macromolecular crystallization, DNA - protein complexes, membrane proteins, and high throughput protein crystallization.

Submissions covering crystallization in drug delivery, novel crystallization methods and design, and contributions bridging the area of small molecule and macromolecular crystallography are particularly welcome.



Thursday, July 26

01.07 New Computational and Experimental Methods

... or changing ways structure determination is carried out but not yet fully demonstrated.

Half day session organized by Tom Terwilliger (terwilliger@lanl.gov) and Mike Soltis (soltis@ssrl.slac.stanford.edu)

02.03 General Interest III

Half day session organized by David Duchamp (dkduchamp@aol.com)

Presentations will be selected from submitted abstracts.

08.01 Applications of Synchrotron Radiation to X-ray Diffraction

Half day session organized by Ana Gonzalez (ana@smb.slac.stanford.edu)

This session will focus on the latest contributions of synchrotron radiation to the field of crystal diffraction. Presentations are welcome in the area of novel developments in synchrotron instrumentation and its applications to methods like Multiwavelength Anomalous Dispersion (MAD), Laue and ultra-high resolution diffraction applied to chemistry and molecular biology.

Confirmed Invited Speaker:

Robert Von Dreele (Los Alamos National Lab, USA)

AFTERNOON ACTIVITIES

Special Interest Group Meeting

SIG Chair meeting with the ACA Council and future Program and Local Meeting Chairs

Getty Center Excursion

As a reward to those who stick around to the end of the meeting we will go to the Getty Center, a major cultural attraction in LA featuring an art museum, a cultural center and an art conservation center (www.getty.edu). See page 3 for further information.

EVENING SOCIAL EVENT

Reception (cash bar) 6:00pm

Awards Banquet 7:00pm - 10:00pm

Biltmore Hotel



Session Numbers for Abstract Submissions

BIOLOGICAL MACROMOLECULES

- 01.00 _____ (specify)
- 01.01 Late Breaking Macromolecular Structures
- 01.02 Computational Methods and Analysis
- 01.03 Macromolecular Complexes
- 01.04 Determining Membrane Protein Structure:
New Methods/New Results
- 01.05 Protein Kinases, Phosphatases and Signaling
Proteins
- 01.06 Problem/Difficult Structures
- 01.07 New Computational and Experimental Methods

GENERAL INTEREST

- 02.00 _____ (specify)

MATERIAL SCIENCES

- 03.00 _____ (specify)
- 03.01 NIST Centennial Celebration Symposium

NEUTRON SCATTERING

- 04.00 _____ (specify)
- 04.01 Gas Clathrates, Ices and Planetary Materials
- 04.02 Neutron Scattering
- 04.03 Planetary Ices

SERVICE CRYSTALLOGRAPHY

- 05.00 _____ (specify)
- 05.01 Area Detectors, Expanded Capabilities and New
Limitations
- 05.02 Diffraction Methods in Undergraduate Education

SMALL ANGLE SCATTERING

- 06.00 _____ (specify)
- 06.01 Complementarity of Small Angle Scattering with
Other Analytical Techniques
- 06.02 New Small Angle Scattering Instrumentation and
Data Analysis Techniques

SMALL MOLECULES

- 07.00 _____ (specify)
- 07.01 Validating Small Molecule Crystal Structures for
Correctness, Quality and Precision
- 07.02 Supra-molecular Structure and Engineering
- 07.03 Cool Structures Symposium

SYNCHROTRON RADIATION

- 08.00 _____ (specify)
- 08.01 Applications of Synchrotron Radiation to X-ray
Diffraction

AMORPHOUS MATERIALS

- 09.00 _____ (specify)

FIBER DIFFRACTION

- 10.00 _____ (specify)

SPECIAL SESSION

- SP.01 Frontiers in Crystallization

TR.01 TRANSACTIONS SYMPOSIUM

- TR.01 High Throughput Crystallography

WORKSHOPS

- WK.01 Iterative Single-wavelength Anomalous
Scattering Method
- WK.02 Real-Space Pair Distribution Function Methods
- WK.03 Atomic Force Microscopy of Crystal Surfaces



Abstract Deadline March 2

Abstract Submission Instructions

Abstract Submission

On-line submission will be available January 1, 2001, at <http://www.hwi.buffalo.edu/ACA/>

Abstracts from members

ACA Members who have paid dues for 2001 should follow the instructions herein; no fee or deposit is required.

Abstracts from non-members

The Advance Registration Form and payment must accompany abstract submissions in any format from non-members. You may submit the abstract electronically and fax the registration form with payment information to (716) 852-4846.

Preparation of Abstract

The entire abstract, including title, authors and their affiliations, footnotes, references, diagrams, tables, equations, etc., must fit into a rectangle 13 cm (5.1") wide by 17 cm (6.7") high and should contain no more than 40 single-spaced typed lines. Times font with 12 point size must be used. Abstracts not conforming to these dimensions will be returned to the author for revision and should be resubmitted before the deadline. Late fees will apply to these revisions. Wording the title and first sentence of your abstract deserves a special effort. Make your main point in the first sentence. Multiple parallel sessions and the large number of posters force meeting attendees to scan the Program and Abstract book selectively. Help them decide whether yours is a "must-see" presentation by stating your main point at the beginning of your abstract. The title should be in upper and lower case letters and should contain no more than 100 characters. Titles with more than 100 characters will be truncated. A one-inch indentation must be left in the first line for insertion of the abstract number. The authors' names and institutions should be in upper and lower case with the presenting author's name listed first.

Authors

The author named first in the abstract must present the paper. No one may be first author on more than one paper - invited or contributed.

Invited Abstracts

Abstracts for invited papers must be submitted in the same manner as those for contributed papers and are subject to the same abstract fees as stated above.

Abstracts on the Web

Abstracts will be posted to the ACA web site before the meeting only if the presenting author's permission is given with the abstract submission. A list of titles and authors will appear on the web about one month after the abstract deadline. Each abstract will be assigned a temporary abstract number at this time. Presenting authors will be notified by postcard of their final abstract number, session name, date, time, and room assignment approximately 4 weeks prior to the meeting. This information will also be posted on the web site.

Submission

Do not send the abstract in more than one format. If you e-mail it, do not send a hard copy. If you send it via postal mail, do not e-mail it.

Revisions

The abstract processing office will not accept revisions. You will have to withdraw the original submission and submit a new one. The same abstract submission fee rules will apply.

Late Abstracts

Abstracts with a postmark or e-mail date after March 2, 2001, will be considered LATE. There will be a \$50.00 late fee for abstracts postmarked or received electronically dated after March 2, 2001. This rule will apply to ACA members, non-members, and invited and contributed abstracts. You may wish to fax your credit card information to (716) 852-4846 or e-mail it with your abstract. Acceptable forms of payment: VISA or MasterCard, and checks drawn on U.S. banks in U.S. funds. No purchase orders. Abstracts received without the appropriate fee(s) will be returned to the submitting author and will not be processed until the fee is received.

All Abstract Submissions Must Contain the Following Information in the Order Presented Below:

- Presenting author's name, address, fax, and e-mail.
- Topic number from the Session Numbers list on page 9. If you are unsure of which number to use, please choose the ".00" under the appropriate SIG and specify the area of interest.
- Is this an invited paper? ☐ yes ☐ no
- Is this a contributed paper? ☐ yes ☐ no
- Your preferred method of presentation ☐ lecture ☐ poster
- May we place your abstract on our web site? ☐ yes ☐ no
- May we place your fax and e-mail on web site? ☐ yes ☐ no
- List three key words for index, not more than 30 characters each.
- Is this a poster for consideration for the Oxford Cryosystems Award? (see page 12)
- Is this a student poster for consideration for the Pauling Prize? (see page 12)
- If this is a student poster, would you be willing to give a 5 minute talk in a poster highlight session?
- Audio/visual requests: _____ (see page 12)

Additional Instructions for Web Site Submission

The recommended method for all abstract submissions is via the web form. Follow the instructions available at: <http://www.hwi.buffalo.edu/ACA/>

Additional Instructions for Disk Submission

Include required information as listed at top of this page. Only one MicroSoft Word file on Macintosh or DOS disk. Send one hard copy of the abstract with the disk. Disks will not be returned. Late fees and/or nonmember registration form and payment must accompany disk.

Additional Instructions for Hard Copy Submission

Include required information as listed at top of this page. There will be a \$50.00 fee (U.S. funds) for any abstract submitted in hard copy by a nonmember. There is no hard copy fee for current ACA Members. The \$50.00 fee is not deductible from the registration fee and is nonrefundable. Use a laser printer to print the abstract. You must reproduce your abstract within the specified dimensions. Send original and one good photocopy. Hard copy, late fees and/or nonmember registration form and payment must accompany the hard copy submission.

Additional Instructions for E-mail Submission

- Include required information as listed at top of this page.
- The "Subject" line of the electronic message should include presenting author's name, fax number, kind and version of word processor. Example: J. Doe, (613) 555-1234, WP Windows 6.0.
- MicroSoft Word and WordPerfect files are binary files. They have to be e-mailed with UUencode, Binhex or "attached" to the message at transmission time. Abstracts

made of just ASCII characters (this includes ASCII and html files containing no figure) can be e-mailed without this precaution.

- Special characters, tables, mathematical formulae and figures are allowed in the word processor file, but please try to keep to a minimum. Mathematical formulae are to be written on a single line with sub and superscripts only. No big fractions.
- Special symbols and Greek characters should be confined to the set of fonts that come with the standard distribution of MicroSoft Word or WordPerfect. Add-on fonts, such as those for mathematical formulae, must be avoided as these may not be available at the abstract processing office.
- E-mail an ASCII (plain text or html) file or a uuencoded or binhex file of Microsoft Word to: **aca-abstracts@hwi.buffalo.edu** Do not send any other messages to this address. For questions send messages to: **aca-inquiries@hwi.buffalo.edu** If an abstract or a question is not acknowledged within 3 working days, please assume that it was not received. Please frequently check the e-mail account from which the abstract was sent. Acknowledgement of receipt, and later correspondence about the program, will be sent there using the reply feature in order to avoid typos in the e-mail address.
- Receipt of each file will be acknowledged via a machine generated reply within 24 hours. This means the file has been received but no implication of "readability" is to be assumed. If the file cannot be decoded or has other problems, the sender will be contacted for corrective action.
- Late fees and/or nonmember registration form and payment must accompany submission.



Posters

Poster Preparation

Each presentation will be assigned a board 4' (1.22m) high x 8' (2.44m) wide. Push pins will be available. Poster session chairs will be available to answer questions and provide help during the setup times. The number of poster sessions is dependent upon the number of poster submissions received. Authors will be assigned dates and times to be present at their board. This notification will be sent by postal mail and posted to the meeting web site.

Pauling Poster Prize

Eligibility: Graduate and undergraduate students only - no post-docs. Awarded to not more than five of the best student (poster) presentations at the Annual Meeting. Each award consists of \$200, a complimentary banquet ticket, and a copy of Linus Pauling's "General Chemistry". Honorable mentions may also be awarded a complimentary banquet ticket. Please indicate that you wish to be considered with your abstract submission. Winners will be announced at the Banquet on Wednesday, July 26.

Oxford Cryosystems Poster Prize

Eligibility: The Oxford Cryosystems Low Temperature Prize is awarded to any poster describing work in low temperature crystallography. The winner will receive a prize of two hundred and fifty pounds sterling donated by Oxford Cryosystems. Please indicate that you wish to be considered with your abstract submission. The winner will be announced at the Banquet on Wednesday, July 26.

Lectures

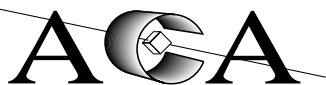
Lecture Preparation

Each session room will have one projection screen, one slide projector and one overhead projector.

We will also provide one computer projector in each room. The computers will all be IBM PC's (no Macs) loaded with the Windows 2000 operating system, and Microsoft PowerPoint software. Speakers should bring PowerPoint files on Iomega Zip Disks or CD's. Arrive at the session in which you are speaking well in advance to copy your file onto the computer's hard drive. Please indicate your need for this equipment with your abstract submission.

When preparing slides please consider:

- Be realistic. One slide per minute is probably too many.
- Make the lettering large so the viewers will be able to read it.
- Lettering should not be smaller than 5% of the height of the slide.
- Test your slides in a large auditorium and stand in the back.
- Slide trays will be available in the Speaker Ready Room. It is the responsibility of the lecturer to prepare the tray and bring it to the session room.



2001 ADVANCE REGISTRATION FORM

Family Name _____

First Name _____

Dept. _____

Inst. _____

St. _____

Box/Apt. # _____

City _____

St/Prov. _____

Zip/Postal Code _____

Country _____

Telephone _____

Fax _____

E-mail _____

Registration forms must be postmarked or received on or before June 1, 2001. After June 1, registration will be accepted at the higher rate. On-site registration will also be available at the higher rate. Cancellations and/or requests for refunds should be made in writing and submitted to ACA Headquarters. For cancellations received before June 1, 2001, 20% of the total remittance will be deducted. Requests received between June 2 and June 30, 2001, will be honored minus 50% of the total remittance. Fees will be not refunded for requests received on or after July 1, 2001.

*Increment charged to nonmember registration may be credited toward new member dues for 2001 by submitting a membership application form with the registration form.

All prices are listed in U.S. dollars and must be submitted in U.S. dollars. Purchase order will not be accepted. Only U.S. checks, and VISA and MasterCard payments will be accepted. ACA, E.I.N. 22-6075182. Please make checks payable to ACA and mail to:

**ACA Meeting Registration
P.O. Box 96 Ellicott Station
Buffalo, NY 14205-0096 USA**

Forms submitted via fax must include VISA or MasterCard payment information. Fax to (716) 852-4846.

Registration Fees

By June 1

After June 1

- | | | |
|---|-------|-------|
| <input type="checkbox"/> Regular Member | \$250 | \$325 |
| <input type="checkbox"/> Retired Member | \$100 | \$100 |
| <input type="checkbox"/> Student Member | \$ 95 | \$ 95 |
| <input type="checkbox"/> Nonmember* | \$325 | \$400 |
| <input type="checkbox"/> Student Nonmember* | \$120 | \$144 |
| <input type="checkbox"/> One-day Member | \$150 | \$225 |
| __Sun __Mon __Tues __Wed __Thurs | | |
| <input type="checkbox"/> One-day Nonmember* | \$195 | \$270 |
| __Sun __Mon __Tues __Wed __Thurs | | |

Registration Total

Workshops

\$60 - registered students

\$70 - all others

- ☐ WK01: Anomalous Scattering Methods
- ☐ WK02: Real-Space Pair Distribution Methods
- ☐ WK03: Atomic Force Microscopy

Workshop Total

Social Program

Will
Attend

Won't
Attend

July 21 Opening Reception

☐

☐

Extra ticket for Opening Reception- \$30 # of tickets _____

July 22 YSSIG Mentor/Mentee Dinner

☐ Mentee \$10 ticket # of tickets _____

☐ Mentor \$10 ticket # of tickets _____

July 23 YSSIG Mixer

☐

☐

Extra ticket for Mixer-\$10 # of tickets _____

July 25 Awards Banquet

☐ \$55 ticket # of tickets _____

☐ \$20 student ticket # of tickets _____

Entree Choice: __ Beef __ Chicken __ Vegetarian

July 26 Getty Center Tour

☐ \$10 bus ticket # of tickets _____

Social Total

Payment Method

☐ Check (U.S. only)

☐ VISA

☐ MasterCard

Credit Card Number

__/_/_/_ - __/_/_/_ - __/_/_/_ - __/_/_/_

Good thru/expiration date ____/____

Authorized Signature
of Card Holder _____

Total Remittance _____



TRAVEL GRANT APPLICATION

Limited funds are available to help students and young scientists attend the **2001 Annual ACA Meeting** in Los Angeles, July 21-26. Preference will be given to those presenting a paper or poster. To apply for assistance, send this completed form, a **copy** of the abstract you plan to submit and a supporting letter from your research advisor. The first deadline for applications is **January 31, 2001**. Applications received after this deadline will be reviewed only if funds remain after the initial review. The final deadline for applications will be March 2, 2001. Information about travel to and lodging in Los Angeles is available at www.hwi.buffalo.edu/ACA/ACA-Annual/LosAngeles/LosAngeles.html

Family Name _____

First Name _____

Dept. _____

Inst. _____

Street _____

Box/Apt. # _____

City _____

St/Prov. _____ **Zip/Postal Code** _____

Country _____

Telephone _____

Fax _____

E-mail _____

Have you ever applied for an ACA travel assistance grant?

☐ No

☐ Yes in _____

Received a travel assistance grant?

☐ No

☐ Yes in _____

Are you an ACA Member?

☐ No

☐ Yes

Estimated cost of transportation: _____

Estimated cost of meals: _____

Estimated cost of lodging: _____

Total amount requested: _____

Are you a:

☐ Undergraduate Student

☐ Graduate Student

☐ Postdoctoral Associate

☐ Other (explain) _____

Name of Professor or Research Director:

Signature of Professor or Research Director: Date:

Signature of Applicant:

Date:

Have you:

☐ Completed this form?

☐ Attached **copy** of abstract to this application?

☐ Attached letter of support from Professor or Research Director?

SUBMIT APPLICATION VIA

Mail

Travel Grant Fund
American Crystallographic Association, Inc.
P.O. Box 96, Ellicott Station
Buffalo, NY 14205-0096

Overnight mail

Travel Grant Fund
American Crystallographic Association, Inc.
c/o Hauptman Woodward Medical Research Inst
73 High St., Buffalo, NY 14203

Fax: (716) 852-4846

E-mail: aca@hwi.buffalo.edu

HOTEL RESERVATION FORM



THE WESTIN BONAVENTURE
HOTEL AND SUITES
Los Angeles

DEADLINE DATE: JUNE 18, 2001
AMERICAN CRYSTALLOGRAPHIC ASSOCIATION, INC.
ANNUAL MEETING JULY 21-26, 2001

The Westin Bonaventure Hotel and Suites is the Headquarters Hotel. To reserve a room, you must complete this form and return it directly to the Hotel with deposit payment

no later than June 18, 2001.

RESERVATION: Please indicate type of accommodation preferred:

# of Rooms	Accommodations	Room Rates	Special Requests
	Single (one person)	\$122.00	<input type="checkbox"/> Non Smoking <input type="checkbox"/> Accessible <input type="checkbox"/> Caption Device <input type="checkbox"/> TDD
	Twin (2 people/1 twin & 1 double bed) <u>Limited availability</u>	\$122.00	
	Double (2 people/1 bed)	\$122.00	
	Triple (3 people/1 twin & 1 double bed) <u>Limited availability</u> (3 people/1 king or queen, 1 rollaway)	\$147.00	
Suites: Please contact the Hotel directly at the phone number noted below			

Rates do not include 14.8% occupancy tax.

*Every effort will be made to accommodate special requests, as availability permits.
If the room type is not available, rooms will be confirmed at the next available room type and rate.*

(Please Print or Type)

Name			Name		
Company			Company		
City State Zip			City State Zip		
Country			Country		
Daytime Phone		Fax	Daytime Phone		Fax
Arrival Date	Time	Departure Date	Arrival Date	Time	Departure Date

Check-in time is 3:00pm. Check-out time is 11:00am.

A deposit of one (1) night room and tax is required to reserve a guest room.

There is an early check-out fee of \$25. Please be sure to confirm your departure date upon check-in.

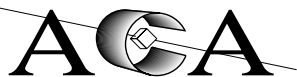
Guarantee Room to Credit Card:	<input type="checkbox"/> MasterCard	<input type="checkbox"/> VISA	<input type="checkbox"/> American Express
Account #	Exp/Good thru Date		
Print Name of Cardholder	Signature of Cardholder		

- To receive the above discounted rate, reservations must reach the Hotel **by June 18, 2001.**
- Should you need to cancel your reservation, please contact the Hotel at least 72 hours before your scheduled arrival date. Cancellations received later than 72 hours prior to arrival forfeit one (1) night deposit.

Reservations are on a first come, first serve basis

Please mail completed form with payment to:

The Westin Bonaventure Hotel and Suites
404 South Figueroa Street
Los Angeles, CA 90071-1710
Reservations Fax: (213) 612-4797 Telephone: (213) 624-1000



AMERICAN CRYSTALLOGRAPHIC ASSOCIATION, Inc.

Application for Membership 2001

Family Name _____

First Name _____

Dept _____

Inst _____

Street _____ Box/Apt/MS _____

City _____ State/Prov. _____

Zip/Postal Code _____ Country _____

Telephone _____ Fax _____

E-mail _____

Date of Birth _____

Highest Degree _____ Field of Degree _____ Year Recv'd _____

Are you currently a post-doc? ☐ Yes ☐ No

Can we list the above information on our web site? ☐ Yes ☐ No

Home Mailing Address:

Street _____

City _____ State/Prov. _____

Zip/Postal Code _____ Country _____

Preferred mailing address: ☐ Business ☐ Home

Membership Category

- ☐ Regular - \$75.00
☐ Student* - \$24.00
☐ Retired - \$39.00
☐ Corporate - \$700.00

Have you previously been a member?

☐ Yes ☐ No

If yes, what year? _____

Special Interest Group(s)

- ☐ Amorphous Materials
☐ Biological Macromolecules
☐ Fiber Diffraction
☐ General Interest Group
☐ Materials Science
☐ Neutron Scattering
☐ Service Crystallography
☐ Small Angle Scattering
☐ Small Molecules
☐ Synchrotron Radiation
☐ Young Scientist

Signatures

Regular members seconding the application

(1) _____ (2) _____

** Member of teaching staff certifying that the applicant is a student, please sign below*

Signature _____ Title _____

Optional Airmail Fees Outside North America only

- ☐ ACA Newsletter \$25.00
☐ 2001 Program & Abstract Book \$20.00

Payment

☐ Check (U.S. only) ☐ VISA ☐ MasterCard

Card Number

____/____/____ - ____/____/____ - ____/____/____ - ____/____/____

Good thru/expiration date ____/____

Signature of Card Holder

*Send application with payment
in U.S. funds to:*

American Crystallographic Association, Inc.
P.O. Box 96 Ellicott Station
Buffalo NY 14205-0096 U.S.A.
Phone: (716) 856-9600 ext. 379
Fax: (716) 852-4846
aca@hwi.buffalo.edu

Membership Fee \$ _____

Airmail Fee(s) \$ _____

TOTAL \$ _____

The benefits of ACA membership include

1. 12 issues of Physics Today magazine each year.
2. Reduced cost of Transactions of the ACA, the published proceedings of the annual symposium on frontier topics.
3. Full abstracts of the annual meeting.
4. The ACA Newsletter, a quarterly newsletter with information on:
 - Positions available (postdoctoral and permanent)
 - Data base access and distribution (protein, organic, inorganic, metal, and powder diffraction data bases)
 - Developments in diffraction and computer technology
 - Listings of National and International meetings of interest to members
 - Notes on the activities of the International Union of Crystallography
 - Program and registration materials for the ACA meetings
 - Crystallographers in the news
5. The IUCr Newsletter, published four times per year by the International Union of Crystallography.
6. Membership in one or more of the Special Interest Groups (SIG) that help define the content of the annual meetings.
7. Lower registration fees for the annual meeting.

For further information contact
American Crystallographic Association, Inc.
P.O. Box 96 Ellicott Station
Buffalo NY 14205-0096
U.S.A.
Phone: (716) 856-9600 ext. 379
Fax: (716) 852-4846
E-mail: aca@hwi.buffalo.edu
Web site: <http://www.hwi.buffalo.edu/aca/>



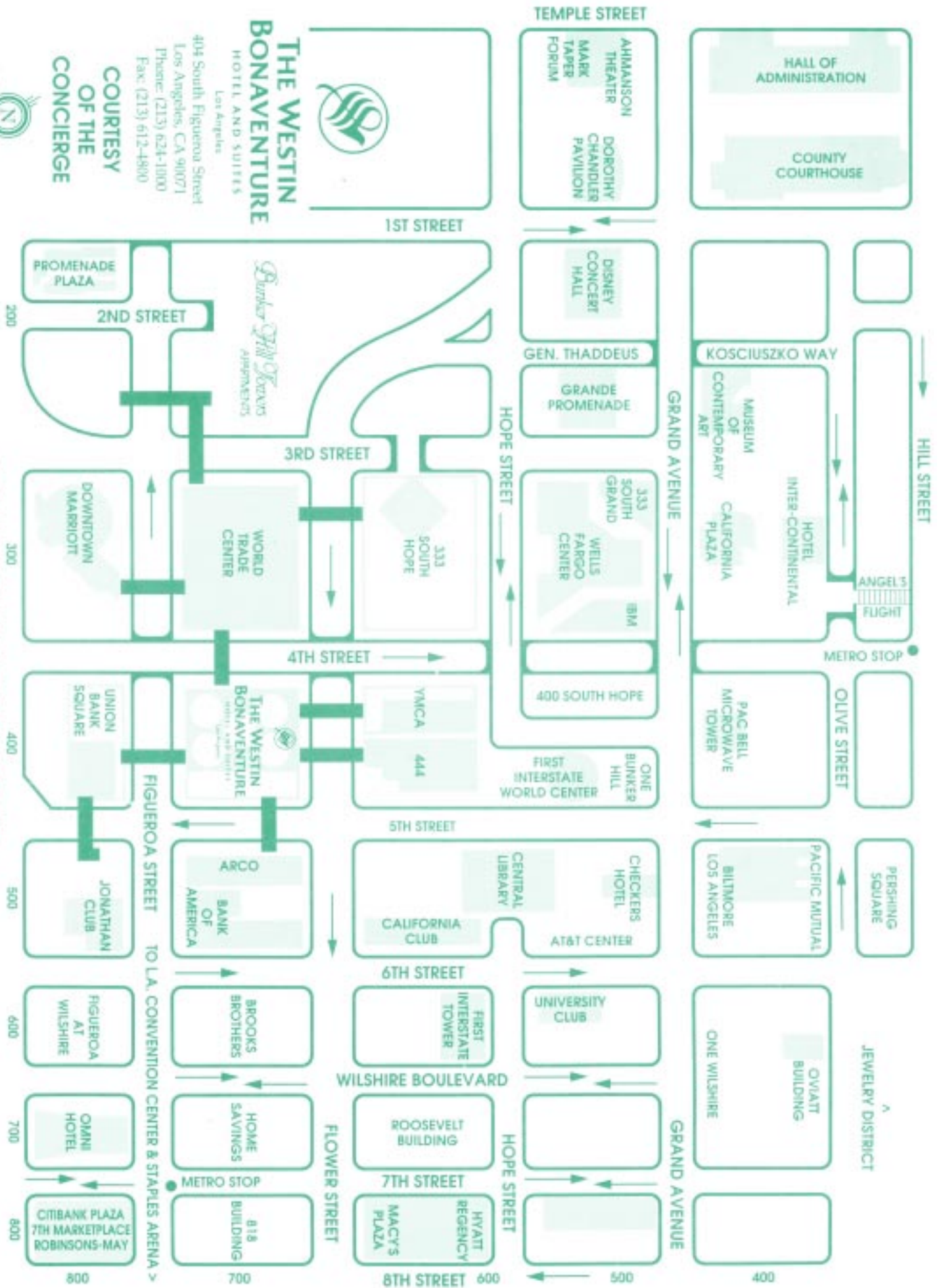
COURTESY OF THE CONCIERGE

404 South Figueroa Street
Los Angeles, CA 90071
Phone: (213) 624-1000
Fax: (213) 612-4890

THE WESTIN BONAVENTURE HOTEL AND SUITES Los Angeles



DOWNTOWN LOS ANGELES





2001 Annual Meeting July 21 - 26 Los Angeles, California

WORKSHOPS

Iterative Single-wavelength Anomalous Scattering Method
Real-Space Pair Distribution Function Methods
Atomic Force Microscopy of Crystal Surfaces

SYNCHROTRON RADIATION

Applications of Synchrotron Radiation to X-ray Diffraction

SMALL MOLECULES

Cool Structures
Validating Structures for Correctness, Quality and Precision
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Complementarity of SAS with Other Analytical Techniques

TRANSACTIONS SYMPOSIUM

High Throughput Crystallography

BIOLOGICAL MACROMOLECULES

Late Breaking Macromolecular Structures
Computational Methods and Analysis
Macromolecular Complexes
Determining Membrane Protein Structure: New Methods/New Results

SPECIAL SESSION

Frontiers in Crystallization

NEUTRON SCATTERING

Gas Clathrates, Ices and Planetary Materials
Neutron Scattering
Planetary Ices

MATERIAL SCIENCES

NIST Centennial Celebration

SERVICE CRYSTALLOGRAPHY

Area Detectors, Expanded Capabilities & New Limitations
Diffraction Methods in Undergraduate Education

Abstract Deadline March 2, 2001
On-line submission available
www.hwi.buffalo.edu/aca/